

COPY**AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111**

Serial Number: 08/941,963

Filing Date: October 1, 1997

Title: TWO-TIER WIRELESS SYSTEM FOR DISTRIBUTED CONTROL/COMMUNICATION

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Dkt: H16-17016 (256.012US1)

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on July 30, 2001, and the references cited therewith.

Claim 39 is amended; as a result, claims 1-3, 5-11, 13-17, 26-28, 30-39 are now pending in this application.

§ 112 Rejection of the Claims

Claim 39 was rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 39 has been amended to specifically identify what was inferred by the objected to phrase. The amendment does not affect the scope of the claim in any manner.

§102 Rejection of the Claims

Claim 39 was rejected under 35 USC § 102(b) as being clearly anticipated by Dilworth et al. (U.S. Patent No. 5,479,400). This rejection is respectfully traversed on the basis that Dilworth et al. does not show each and every element of the claim. Claim 39 is written in means plus function format. As such, it covers the structure described in the specification that performs the function, and equivalent structures. Dilworth et al. shows and describes a microcellular telephone network with mobile transceivers. In the current application, the "means for transmitting information at a low power" of claim 1 corresponds to the structure described at page 4, lines 9-13: "The devices comprise standard home, small business, commercial and industrial sensors, identification tags and actuators such as motion detectors, glass breakage, pressure, temperature, humidity and carbon monoxide sensors, as well as motors and switches controlling automated systems, each equipped with a transceiver." Such devices or sensors are also described as operating in unlicensed frequencies at low power: "a low power, short range, single chip transceiver operating at unlicensed frequencies" page 4, lines 4-5. This is a precise definition that clearly is not the same as the "low" power mobile cellular transceivers of Dilworth et al., which inherently operate at higher power.

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The difference in power between a transceiver in Dilworth et al., such as a cellular device and a lower power device as described in the current application is very large. This difference in power is one of the main reasons that the low power frequencies do not need to be licensed, they do not interfere with other such low power devices unless they are located very close together. The detailed description indicates that the range of the low power devices is 3-6 meters. Dilworth "low power" transceivers operate in ranges of miles, and would be essentially worthless if they had a low power level corresponding to the current application. Since Dilworth et al. does not show each and every element, the rejection should be withdrawn. ①

It should further be noted that the original rejection of the claims was based on LeBlanc et al. (US 5,960,341), also a cellular based network. This rejection was overcome by similarly pointing out that "low power" was a relative term. Low power in a cell phone means a range of kilometers, while low power as used in the present application is on the order of meters, 3-6 meters in one embodiment. No one, prior to the present inventors thought of the concept of using such low power devices in conjunction with a plurality of higher power routers.

§103 Rejection of the Claims

Claims 1-3, 5-11 and 13-17 were rejected under 35 USC § 103(a) as being unpatentable over Dilworth et al. (U.S. Patent No. 5,479,400) in view of Carvey (U.S. Patent No. 5,699,357). This rejection is respectfully traversed, as the combination is not proper.

As mentioned above, Dilworth et al. does not describe low power devices as defined in the application. Further, Carvey et al. requires in the summary that: "The data network of the present invention utilizes the fact that the server microcomputer unit and the several peripheral units which are to be linked are all in close physical proximity, e.g., under two meters separation, to establish, with very high accuracy, a common time base or synchronization." In other words, Carvey expressly teaches away from any sort of combination of routers or repeaters, as devices must be in close physical proximity. Thus, there is no suggestion to combine Carvey et al. and Dilworth et al. The present invention makes the leap of using very low power devices and routers to allow the low power devices to be located further from a controller. ②

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Claims 1 - 9 all have the elements of claim 1 and distinguish the references for at least the same reasons. Claims 10 - 17 similarly refer to low power transceivers and a short range, as well as containing multiple routers. This rejection should be withdrawn.

Claims 26-28 were rejected under 35 USC § 103(a) as being unpatentable over Dilworth et al. (U.S. Patent No. 5,479,400) in view of Parken (U.S. Patent No. 5,010,583). This rejection is respectfully traversed. As mentioned above, Dilworth does not describe low power transmissions, nor transmissions of a physical condition as claimed in claim 26 and dependent claims 27 and 28. Parken is directed to a portable or mobile communication unit 130 per the abstract, and to a repeater for a wide area coverage multiple repeater system. Thus, Parken is not compatible with a low power architecture either. There is no suggestion for combining Dilworth and Parken, and even if combined, both relate to cellular type of communications over wide areas, not to the lower power communications as described and claimed in the present application. Thus, the combination lacks at least one element, and the rejection should be withdrawn. (B)

Claim 30 was rejected under 35 USC § 103(a) as being unpatentable over Parken (U.S. Patent No. 5,010,583) in view of Carvey (U.S. Patent No. 5,699,357). This rejection is respectfully traversed. Again, neither Parken nor Carvey deal with low power transceivers as claimed. Parken deals with a wide area coverage multiple repeater system. Further, Carvey et al. requires in the summary that: "The data network of the present invention utilizes the fact that the server microcomputer unit and the several peripheral units which are to be linked are all in close physical proximity, e.g., under two meters separation, to establish, with very high accuracy, a common time base or synchronization." In other words, Carvey expressly teaches away from any sort of combination of routers or repeaters, as devices must be in close physical proximity. Thus, there is no suggestion to combine Carvey et al. and Parken. (4)

Claims 31-35 were rejected under 35 USC § 103(a) as being unpatentable over Parken (U.S. Patent No. 5,010,583) in view of Carvey (U.S. Patent No. 5,699,357) as applied to claims 30 above, and further in view of Dilworth et al. (U.S. Patent No. 5,479,400). Claims 31-35 depend from claim 30 which is already believed allowable. Dilworth et al. does not provide the

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elements of claim 30 missing from the combination of Parken and Carvey, therefore dependent claims 31-35 should be allowed.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney 612-373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 22 day of October, 2001.

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Signature